



BUILDING CODE COMMISSION

IN THE MATTER OF Subsection 24(1) of the *Building Code Act*, S.O. 1992, c. 23, as amended.

AND IN THE MATTER OF Article 9.10.20.3. of Regulation 332/12, as amended, (the “Building Code”).

AND IN THE MATTER OF an application by Lucas Eisen for the resolution of a dispute with Will Johnston, Chief Building Official, to determine whether the proposed fire fighting access via a laneway to a two storey house that is sprinklered in accordance with NFPA-13R, provides sufficiency of compliance with Article 9.10.20.3. of Division B of the Building Code, when considering Appendix A-9.10.20.3., at 572 Palmerston Avenue, Toronto, Ontario.

APPLICANT	Lucas Eisen Homeowner Toronto, Ontario
RESPONDENT	Will Johnston Chief Building Official City of Toronto, Ontario
PANEL	Stephen Wong, Chair Alexandra Chow Michael Egberts
PLACE	City of Toronto, Ontario
DATE OF HEARING	July 4, 2019
DATE OF RULING	July 4, 2019
APPEARANCES	Gary Eisen Homeowner Toronto, Ontario Agent for the Applicant Wade Tam Wade Tam Building Code Consultant Toronto, Ontario Agent for the Applicant

David Johnson
Toronto Building, Plan Examination
City of Toronto
Toronto, Ontario
Designate for the Respondent

Selva Panchanatham
Building Engineer
City of Toronto
Toronto, Ontario
Designate for the Respondent

Yoshi Imahori
Fire Protection Engineer
City of Toronto
Toronto, Ontario
Designate for the Respondent

RULING

1. Particulars of Dispute

The Applicant has applied for a building permit under the Building Code Act, 1992, to construct a detached laneway house at 572 Palmerston Avenue, Toronto, Ontario.

The building permit seeks to construct a two storey, detached laneway house that is adjacent to a public back lane and is located in the same lot of an existing single detached house. The proposed laneway house will include a 48 m² floor area for vehicle parking on its first storey and a 60 m² residential space on its second storey. In addition, the proposed laneway house will be comprised of combustible timber construction and will be sprinklered in accordance with NFPA-13R.

In dispute is whether the proposed laneway house sufficiently meets the Building Code requirements related to fire department access to the proposed building. More specifically, the dispute for the Commission to determine is whether the proposed fire fighting access via a laneway to a two storey house that is sprinklered in accordance with NFPA-13R, provides sufficiency of compliance with Article 9.10.20.3. of Division B of the Building Code, when considering Appendix A-9.10.20.3., at 572 Palmerston Avenue, Toronto, Ontario.

2. Provisions of the Building Code in Dispute

9.10.20.3. Fire Department Access to Buildings

(1) Access for fire department equipment shall be provided to each *building* by means of a *street*, private roadway or yard. (See Appendix A.)

(2) Where access to a *building* as required in Sentence (1) is provided by means of a roadway or yard, the design and location of such roadway or yard shall take into account connection with public thoroughfares, weight of firefighting equipment, width of roadway, radius of curves, overhead clearance, location of fire hydrants, location of fire department connections and vehicular parking.

3. Appendix Note

A-9.10.20.3.(1) Fire Department Access Route Modification.

In addition to other considerations taken into account in the planning of fire department access routes, special variations could be permitted for a house or residential building that is protected with an automatic sprinkler system. The sprinkler system must be designed in accordance with the appropriate NFPA standard and there must be assurance that water supply pressure and quantity are unlikely to fail. These considerations could apply to buildings that are located on the sides of hills and are not conveniently accessible by roads designed for fire fighting

equipment and also to infill housing units that are located behind other buildings on a given property.

4. Applicant's Position

The Agent for the Applicant submitted that a building permit application was made on December 20, 2018 to construct a new laneway house. The Agent advised that the proposed two storey laneway house will replace an existing single storey detached garage located at the back of the residential lot. The Agent explained that there is an existing one storey detached house located at the front of this same lot.

The Agent advised that the proposed laneway house will include a 48 m² floor area for vehicle parking on its first storey and a 60 m² residential space on its second storey. In addition, the proposed laneway house will be comprised of combustible timber construction and will be sprinklered in accordance with NFPA-13R.

The Agent submitted that the provision of the Building Code in dispute relates to Article 9.10.20.3. of Division B. The Agent submitted that it was his position that Article 9.10.20.3. is a qualitative requirement and that there is no performance based specifications to be satisfied.

The Agent advised that the Toronto Building Division and Toronto Fire Services have developed in-house policies and requirements to determine how compliance with Article 9.10.20.3. of Division B of the Building Code can be achieved. The Agent explained that the municipality is requiring that either the laneway house be located no more than 45 m from the intersection of the public lane with a street where a fire fighting vehicle can be parked or to have a clear minimum passageway width of 1.0 m from the house fronting the street to the laneway house. The Agent added that the municipality is also requiring that a fire hydrant be located not more than 45 from the intersection of the laneway and street or from the front of the property facing the street.

In this case, the Agent submitted that the nearest fire hydrant is located less than 45 m from the front of the property at 572 Palmerston. However, the Agent explained, the back of the detached laneway house is located adjacent to a public lane, which is within 55 m of London Street, located to the north via the public lane. The Agent advised that the width of the walkway located at the front of the property between the north wall of the existing one storey house and the adjacent northern neighbor's house is approximately 0.9 m with no possibility of increasing the width to 1.0 m, as required by the municipality. The Agent explained that the width of the walkway between the house's south wall and the southern neighbor's property line is approximately 0.95 m. The Agent submitted that several attempts were made to request an easement agreement with the adjacent southern property owner to widen the walkway to 1.0 m but the neighbor has repeatedly refused to enter into an easement agreement.

The Agent submitted that although sprinklering is not required by the Building Code for the subject laneway house, the Applicant is proposing to sprinkler the new house as a compensating measure to achieve sufficiency of compliance. The Agent maintained that the

explanation provided in Appendix Note A-9.10.20.3.(1) further supports sprinklering as an option to achieve compliance with Sentence 9.10.20.3.(1) as it states, "...special variations could be permitted for a house or residential building that is protected with an automatic sprinkler system... These considerations could apply to buildings that are located on the sides of hills and are not conveniently accessible by roads designed for fire fighting equipment and also to infill housing units that are located behind other buildings on a given property". The Agent submitted that the City of Toronto has accepted sprinklering in the past as compensation for minor deviations from Building Code requirements and provided some examples of such buildings. The Agent argued that automatic sprinkler protection will provide fire suppression at its source and will prevent fire spread. Therefore, the Agent maintained, sprinklering the laneway house in accordance with NFPA-13R achieves compliance with the objective and functional statements associated with Article 9.10.20.3. of the Building Code since early fire suppression and prevention of fire spread would aid emergency response by providing more time for occupants to evacuate or for rescue operations to take place.

The Agent maintained that the deviation from the municipality's minimum 1.0 m clear passageway width requirement is minimal. In support of the claim, the Agent pointed out that the proposed clear width of 0.9 m meets the Building Code requirements for stair width within a Part 9 building, which is deemed to be an acceptable access width for firefighting and rescue operations within a dwelling unit. Therefore, the Agent maintained if a 0.9 m clear access width is acceptable inside a home for firefighting and rescue operations in accordance with the Building Code, how can the municipality require that the exterior clear access width be 1.0 m, which is not specified by the Building Code.

The Agent submitted subsection 35 (1) of the Building Code Act states, "This Act and the building code supersede all municipal by-laws respecting the construction or demolition of buildings". As such, the Agent argued, the Building Code Act would disallow any municipal bylaw such as Toronto's Laneway Bylaw, from imposing regulations that over-ride the Building Code's requirements. The Agent submitted it was his position that Toronto's bylaw in this case was not in line with the Building Code's requirements.

In response to questions, the Agent acknowledged that there were services located on the side wall where the access passageway is proposed. The Agent submitted that the Applicant would consider relocating the services where possible.

In conclusion, the Agent submitted that the proposal to have a 0.9 m clear width passageway instead of 1.0 m is a minor deviation when considering the laneway house will be sprinklered in accordance with NFPA-13R, and when considering that Part 9 of the Building Code permits an interior clear access width of 0.9 m, which would be used by emergency responders. Further, the Agent maintained that when considering the reasoning and justifications presented, it is his opinion that sufficiency of compliance with the prescriptive requirements of Article 9.10.20.3. of the Building Code and its associated objective and functional statements have been demonstrated.

5. Respondent's Position

The Designate submitted that Article 9.10.20.3.(1) states, "Access for fire department equipment shall be provided to each *building* by means of a *street*, private roadway or yard". In this case, the Designate advised, the proposal to construct a new house at the rear of the property behind an existing house does not provide access for fire department equipment to this building by street, private roadway or yard, as required by the Building Code.

The Designate submitted that during the review of the subject permit application, Toronto Building Division engaged Toronto Fire Services (TFS) to consult with respect to whether TFS could adequately access the proposed building to the rear of 572 Palmerston Avenue.

The Designate submitted that TFS advised that the proposed access width will not meet their needs and would impede their ability to respond in an emergency situation. The Designate submitted TFS further advised that they will require a clear path of travel from the street at Palmerston Avenue. that is not less than 1.0 m wide, a headroom clearance of 2.1 m, and that the owner should take precautions to ensure that this path of travel is surfaced to be accessible in all conditions.

The Designate submitted that the municipality does not disagree that sprinklering the proposed laneway house will provide benefits such as fire suppression. Rather the municipality is disputing the proposed access width of the passageway for emergency personnel. The Designate advised that the municipality's 1.0 m clear access width requirement, which has been in place for over 30 years and is based on the needs and requirements of firefighting personnel to respond to an emergency, including the equipment a responder may need to use in such a situation, such as ladders, axes, extinguishers, hoses, fans etc. The Designate submitted that the minimum 1.0 m clear access width is in the interest of public safety to facilitate response to emergencies in buildings. The Designate submitted evidence to show that there are also service metres, piping and equipment that protrude into the proposed access passageway which reduces the clear path to substantially less than 0.9 m, thus further impeding access for emergency response.

In response to questions, the Designate submitted that the municipality does not agree with the Applicant that Appendix Note A-9.10.20.3.(1) exempts access requirements for a building. The Designate submitted that the Appendix Note specifically states. "**In addition to other considerations** taken into account in the planning of fire department access routes, special variations could be permitted for a house or residential building that is protected with an automatic sprinkler system... " (emphasis added). The Designate argued that neither the Building Code nor the Appendix would permit - no fire department access to a building because sprinklers are provided. The Designate submitted that Article 9.10.20.3. does not prescribe access requirements needed by emergency personnel such as paramedics or firefighters, however, functional statement F12 associated with Article 9.10.20.3. states, "To facilitate

emergency response". The Designate submitted that it is the municipality's position that the proposal to sprinkle the building does not satisfy the stated functional statement F12 to facilitate emergency response.

In summary, the Designate submitted that it is the municipality's position that the subject proposal does not provide the required access for fire department personnel and their equipment to access a building for emergency response as per the functional statement associated with Article 9.10.20.3. of the Building Code.

6. Commission Ruling B-2019-11

It is the decision of the Building Code Commission that the proposed fire fighting access via a laneway to a two storey house that is sprinklered in accordance with NFPA-13R, does not provide sufficiency of compliance with Article 9.10.20.3. of Division B of the Building Code, when considering Appendix A-9.10.20.3., at 572 Palmerston Avenue, Toronto, Ontario.

7. Reasons

i) Article 9.10.20.3. of Division B of the Building Code states:

(1) **Access** for fire department equipment shall be provided to each *building* by means of a *street*, private roadway or yard. (See Appendix A.)

(2) Where **access** to a *building* as required in Sentence (1) is provided by means of a roadway or yard, the design and location of such roadway or yard shall take into account connection with public thoroughfares, weight of firefighting equipment, width of roadway, radius of curves, overhead clearance, location of fire hydrants, location of fire department connections and vehicular parking (emphasis added)


Functional statement F12 associated with both Sentences 9.10.20.3.(1) and 9.10.20.3.(2) states, "To facilitate emergency response".

The Commission heard evidence and testimony that the emergency personnel who would be responding to a fire or emergency at the building require a minimum access width of 1.0 m. The Commission heard that the proposed clear access widths are less than the minimum 1.0 m identified by emergency personnel. In addition, the Commission heard that there are further substantial reductions due to the presence of service metres, piping and equipment protruding into the access passageways.

The Commission heard evidence that the Applicant is proposing to sprinkle the subject building as a compensating measure for the reduced access width to the laneway house.

It is the Commission's opinion that the compensating measure offered by the Applicant to sprinker the building addresses fire suppression. However, it is also the Commission's opinion that sprinklering the building does not sufficiently compensate for a reduction in the clear access width required by firefighters to access a building for emergency response.

Dated at the City of Toronto this 4th day in the month of July in the year 2019 for application number B 2019-11.



Stephen Wong, Chair



Alexandra Chow



Michael Egberts